# UNIVERSITY OF SWAZILAND

# **FACULTY OF COMMERCE**

### **DEPARTMENT OF BUSINESS ADMINISTRATION**

# **MAIN EXAMINATION 2006**

TITLE OF PAPER:

MANAGEMENT INFORMATION SYSTEMS I

DEGREE AND YEAR: DCOM III

COURSE NUMBER:

BA 311

TIME ALLOWED:

THREE (3) HOURS

INSTRUCTIONS: 1. THIS PAPER CONSISTS OF SECTIONS (A) AND (B)

2. THE CASE STUDY SECTIONS (A) IS COMPULSORY

3. ANSWER ANY THREE QUESTIONS FROM SECTION B.

Note MARKS WILL BE AWARDED FOR GOOD COMMUNICATION IN ENGLISH AND FOR ORDERLY PRESENTATION OF WORK

THIS EXAMINATION PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

# **SECTION A**

Werner Merchandise, Inc is a catalog firm that provides a variety of stock, for the home gardener, such as kneeling pads, wind chimes, garden statuary and garden tools. The company sells directly to the home gardener by taking mail and phone orders.

Werner Merchandise purchases the merchandise it resells from other firms both within Africa and internationally. At present, the company's purchase order system is completely manual and management is considering automating the purchase order system to increase the speed of processing. A copy of the manual purchase order system is shown below. If the purchase order system is computerized and the fields in the manual purchase order are used for the computerized purchase order record then
WERNER MERCHANDISE DATE:
DATE
SHIP VIA;
VENDOR N0:
TERMS:
Quantity Stock No Description Unit Price
Purchasing Agent
Werner Merchandise
a) What input controls might be considered for the fields in the purchase order record? 10 marks
b) What access control might the firm consider for its purchase order records?  10 marks
c) What additional controls might the firm consider for its purchase order records?  10 marks
d) Does automation of the purchasing system pose any ethical issues to the company? 10 marks

#### SECTION B

Answer any three questions from this section

### Question 1

A small equipment hire company is considering it's information systems strategy. A consultant has produced a comprehensive requirements specification which is now being used to select appropriate software. Two alternatives are currently being examined.

The first proposal is from a company that has suggested that their software package fulfils 90% of the company's requirements. They have proposed that the company purchases the package and that further work is commissioned to tailor it to the company's specific requirements.

- a) Briefly explain three (3) advantages of adopting software package. 6 marks
- b) Comment on any dangers you can see in accepting the proposal of tailoring the package to the company's specific requirements. 7 marks
- c) The second alternative is to commission a local software house to build a tailored solution. The software will be designed to fulfill the exact needs of the hire company. Briefly explain three (3) advantages of adopting such a tailored solution to the company's requirements.

  7 marks

### Question 2

- a) Evaluate the strengths and weaknesses of the four main strategies for information systems conversion. 10 marks
- b) Which conversion strategy would you use for each of the following? Give brief reasons for your answers.
  - -A transaction tracking system for each of the purchase and sale of stocks on the Johannesburg Stock Exchange.
  - -A monthly batch system to record student attendance data of 2000 students in a high school
  - -A process control system on a chemical plant
  - -A corporate accounting system that will tie together local general ledger systems from operating units. 10 marks

#### Question 3

A small chain of thirty book shops owned by HM stationery currently have a manual records system to handle day-to-day transactions, invoicing stock control and ordering. The shops are all situated in a geographical area of radius 150 km. The management of HM stationery believes that a computerised system is now necessary to improve the efficiency of the above operations. They also believe that implementing a database would be better. They have engaged you as a consultant to advise them.

- a) Describe the responsibilities and role in the organisation of the database administrator. 6 marks
- b) What are the advantages and disadvantages of database versus traditional systems analysis and design for the proposed system?

  14 marks

#### Question 4

A well organised and efficiently run computer department serving the needs of a typical target business should have administrative, systems development, and processing controls in place.

- a) Define the areas covered by each of these and examine the techniques used within each to ensure maintenance of the maximum feasible level of control.

  12 marks
- b) What aspects of a database system are of particular importance from the point of view of control?

  8 marks

# Question 5

An important aspect of systems analysis is the fact finding. Stage of a systems investigation. Depending on the circumstances and the systems being studied, several different methods of fact finding may be used. You are required to:

- a) State three (3) methods of fact finding
- b) Give their advantages and disadvantages and the circumstances in which each might be used.

  20 marks